

Title (en)
PROCESS FOR THE SEPARATION OF AMMONIA AND CARBON DIOXIDE FROM MIXTURES CONTAINING AMMONIA, CARBON DIOXIDE AND WATER

Publication
EP 0018028 B1 19830126 (EN)

Application
EP 80200296 A 19800329

Priority
US 3037479 A 19790416

Abstract (en)
[origin: US4256471A] An improved process for the separate recovery of substantially pure ammonia and substantially pure carbon dioxide from mixtures containing ammonia and carbon dioxide, and possibly water, such as are obtained as by-products in the manufacture of melamine from urea or the synthesis of urea from ammonia and carbon dioxide. The by-product mixture is introduced into a process loop having an ammonia separation zone, a carbon dioxide separation zone and a desorption zone, the zone to which the mixture is initially fed being dependent upon its composition. The separation is effected by maintaining a system pressure differential between the ammonia and carbon dioxide separation zones, or adding diluting water to the carbon dioxide separation zone. The efficiency of the separation is enhanced by introducing a carbon dioxide containing gaseous phase, and preferably an excess of an inert gas, into the bottom of the ammonia separation zone.

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IPC 8 full level
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B01D 19/0068 (2013.01 - EP US); **C01B 32/50** (2017.07 - EP US); **C01C 1/12** (2013.01 - EP US); **Y02C 20/40** (2020.08 - EP US)

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